5815

Dart Aerospace Ltd.

Date: Friday, 5/25/2007 8:36:41 AM
User: Kim Johnston

Process Sheet

POSITIVE RECALL

EFFECTIVE 07.06.05 AUTH GP
RELEASED 07.06.06 DATE GP

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: ARM
Job Number	: 32645		
Estimate Number	: 12882		
P.O. Number	:	Part Number	: D3560042
This Issue	: 5/25/2007 S.O. No. :	Drawing Number	: D3560 REV.B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : SMALL /MED FAB	Drawing Revision	: B
Previous Run	:	Material	:
Written By	:	Due Date	: 6/5/2007 Qty: 30 Um Each
Checked & Approved By	: 07.05.25		
Comment	: Est Rev:A New Issue 07.05.24 EC		

10

Additional Product

Job Number:

Seq. #:	Machine Or Operation:	Description :
1.0	M6061T6B0500X05000	6061-T6 Bar .50" x 5.0"

Comment: Qty.: 1.4648 f(s)/Unit Total : 43.9425 f(s)
6061-T6 Bar 0.50" x 5.00"
Batch: 17625 BG 07.06.01

2.0	BAND SAW	BAND SAW

Comment: BAND SAW
Cut blanks 16.750" long BG 07.06.01

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1

Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA694 Rev: A4 & Dwg D3560 Rev: B

2-C'sink 0.196" hole on manual mill as per dwg D3560

3-Deburr per dwg D3560 J.L/BG 07.06.01

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE

Comment: INSPECT PARTS AS THEY COME OFF MACHINE J.L/BG BG 07.06.01

5.0	QC8	SECOND CHECK

Comment: SECOND CHECK BG 07.06.06 10

Form: mrpprocs

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector
07.06.06	11	NO POWDER COAT. CHEM CONV. COAT ONLY. REF ATTACHED DJ EMAIL				07.06.06 per QSI 042	07.06.07

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes (No) **DQA:** (D) **Date:** 07/06/12

QA: N/C Closed: ____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Date: Friday, 5/25/2007 8:36:41 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services
Drawing Name: ARM

Job Number: 32645
Part Number: D3560042

Job Number:

Seq. #:	Machine Or Operation:	Description :
6.0	D3592I	PLATE

Comment: Qty.: 1.0000 Each(s)/Unit Total : 30.0000 Each(s)
PLATE
B 32661 I.E. 07.06.06 5

7.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1

Comment: LARGE FABRICATION RESOURCE 1
1-Weld assembly as per dwg D3560
I.E. 07.06.07 5

8.0	QC5	INSPECT WORK TO CURRENT STEP

07.06.07
Comment: INSPECT WORK TO CURRENT STEP

9.0	QC9	VISUAL WELDING INSPECTION

Comment: VISUAL WELDING INSPECTION
M 07/06/07 (S)

10.0	HAND FINISHING1	HAND FINISHING RESOURCE #1

Comment: HAND FINISHING RESOURCE #1
Chemical Conversion Coat as per QSI 005 4.1
A.M 07.06.07 (S)

11.0	POWDER COATING	POWDER COATING

POSITIVE RECALL
NO POWDER COAT

Comment: POWDER COATING SEE CWO CHANGE
Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

12.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION

N/A
Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

13.0	PACKAGING 1	PACKAGING RESOURCE #1

GA D
Comment: PACKAGING RESOURCE #1
Identify and Stock
Location: _____

Form: process

Date: Friday, 5/25/2007 8:36:41 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARM

Job Number: 32645

Part Number: D3560042

Job Number:

Seq. #:	Machine Or Operation:	Description :
140	QC21	FINAL INSPECTION/W/O RELEASE

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion

07/06/12 (1)

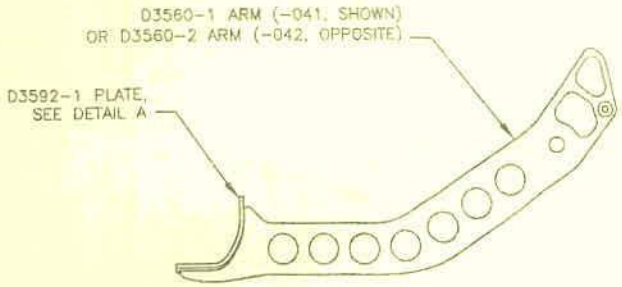
07.06.12 (1)

POSITIVE RECALL

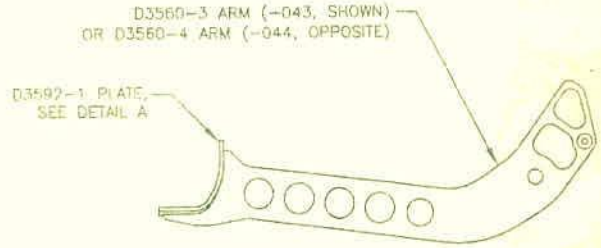
EFFECTIVE _____ AUTH _____

RELEASED _____ DATE 07.06.12

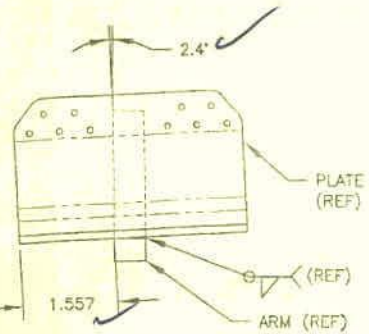
Form: mmmm.rpt

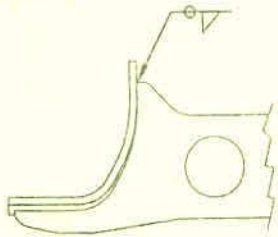


D3560-041 ARM WELDMENT (SHOWN),
D3560-042 ARM WELDMENT (OPPOSITE)



D3560-043 ARM WELDMENT (SHOWN),
D3560-044 ARM WELDMENT (OPPOSITE)





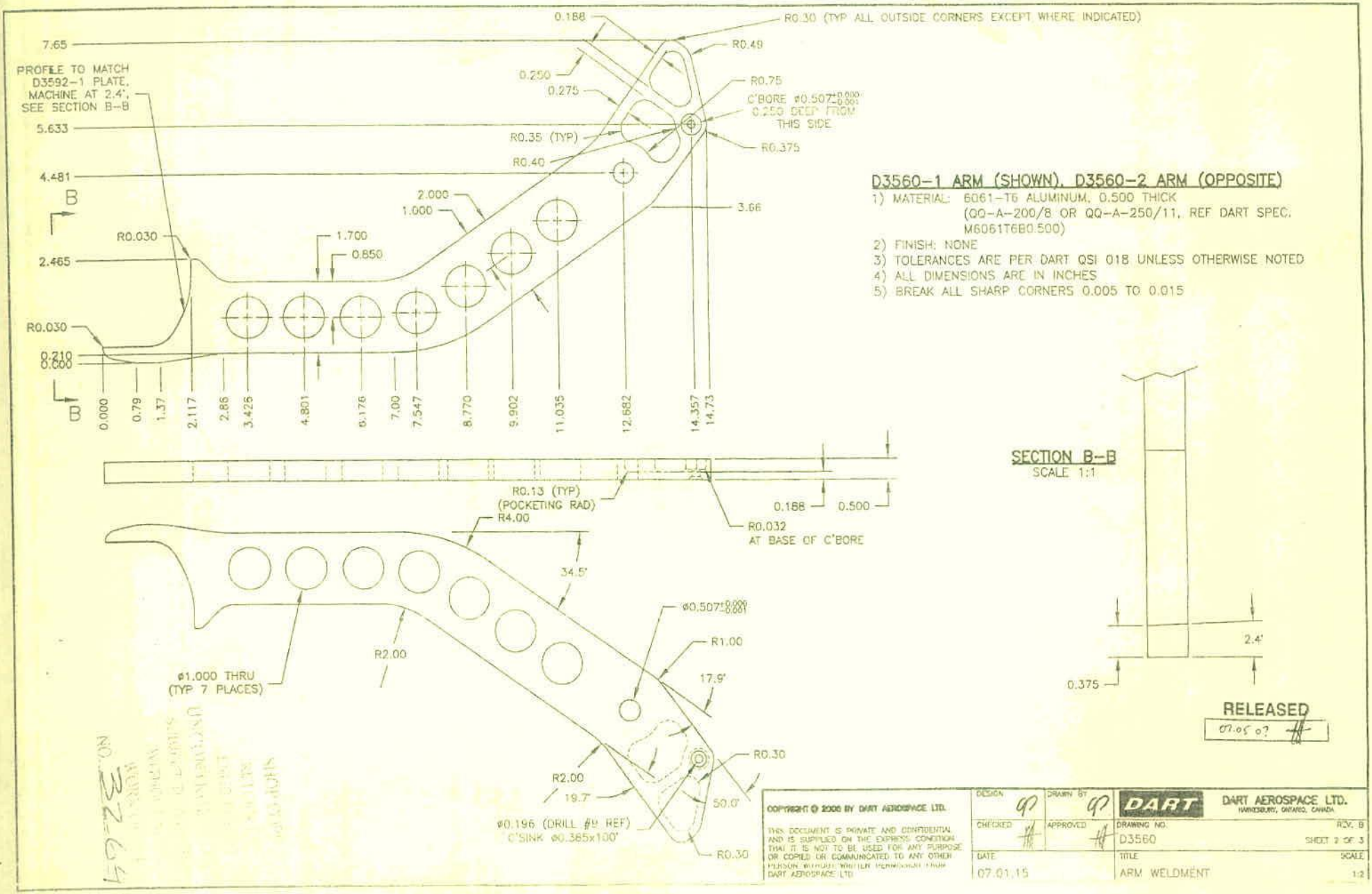
DETAIL A
(SCALE 1:1)

GENERAL NOTES
1) WELD PER QSI 004
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 004 4.3
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES

RELEASED
07.05.07

B	07.01.15	REDESIGN AS WELDMENT, ADD POCKETS	
A	06.09.25	NEW ISSUE	

DESIGN	DRAWN BY	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3560	REV. B
DATE 07.01.15		TITLE ARM WELDMENT	SHEET 1 OF 3 SCALE 1:4



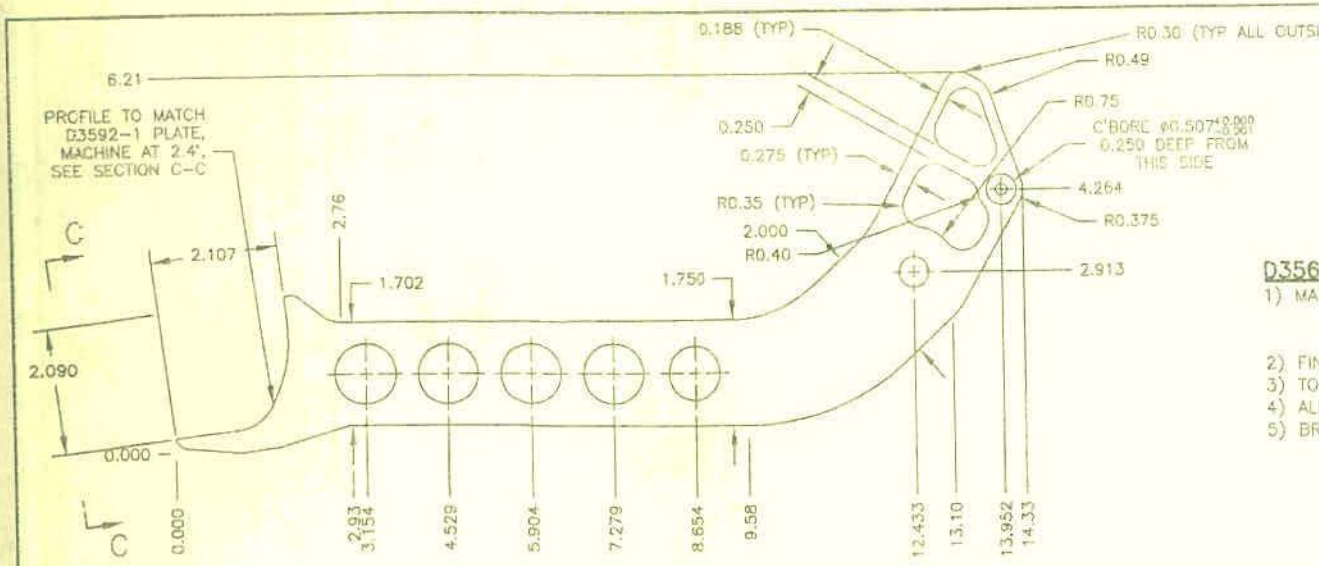
D3560-1 ARM (SHOWN), D3560-2 ARM (OPPOSITE)

1) MATERIAL: 6061-T6 ALUMINUM, 0.500 THICK (QQ-A-200/8 OR QQ-A-250/11, REF DART SPEC. M6061T6B0.500)
2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP CORNERS 0.005 TO 0.015

SECTION B-B
SCALE 1:1

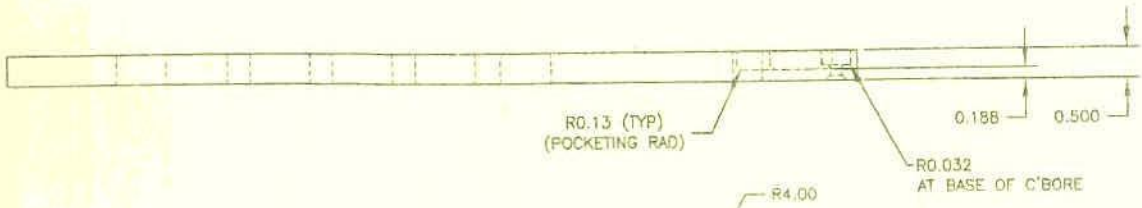
RELEASED
07.05.07

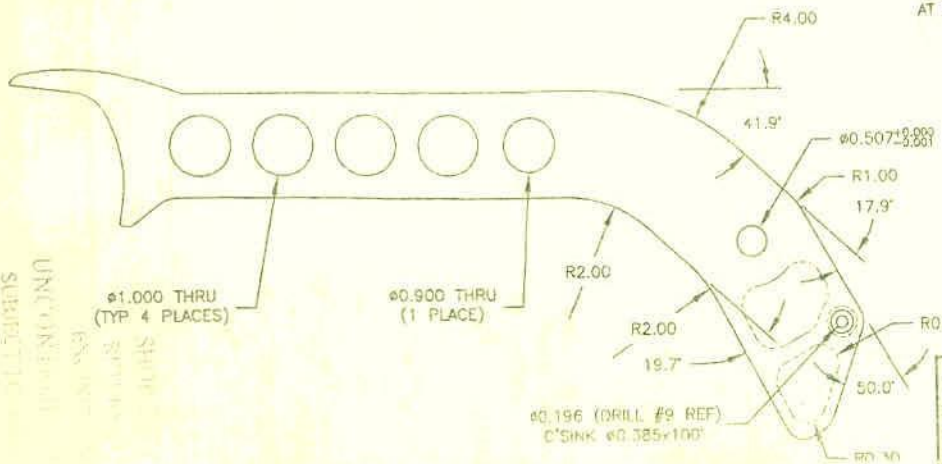
DESIGN	DRAWN BY	DART AEROSPACE LTD. PEMBROKE, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3560 — REV. B — SHEET 2 OF 3
DATE 07.01.15		TITLE ARM WELDMENT — SCALE 1:2

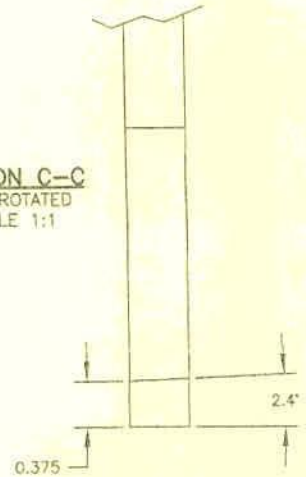


D3560-3 ARM (SHOWN), D3560-4 ARM (OPPOSITE)

1) MATERIAL: 6061-T6 ALUMINUM, 0.500 THICK (QQ-A-200/8 OR QQ-A-250/11, REF DART SPEC. M6061T6B0.500)
2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP CORNERS 0.005 TO 0.015







SECTION C-C
VIEW ROTATED
SCALE 1:1

RELEASED
07.05.07

DESIGN	DRAWN BY	DART AEROSPACE LTD. HUNTSVILLE, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3560	REV. B SHEET 3 OF 3
DATE 07.01.15		TITLE ARM WELDMENT	SCALE 1:2

DART AEROSPACE LTD	Work Order:	32[illegible]
Description: ~~Crosstube Assembly~~ ATR1	Part Number:	3560[illegible]2
Inspection Dwg: 23560 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[x] First Article [ ] Prototype

	Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	1.773	±.003	1.773	✓			
	Ø.502	+.000 -.001	.507	✓			
	.35	±.01	.250	✓			
	.185	"	.185	✓			
	.250	"	.250	✓		"	
	.275	"	.275	✓			
	2.165	"	2.165	✓			
	12.637	"	12.632	✓			
	14.173	±.003	14.173	✓			
	4.451	±.010	4.451	✓			
	5.633	"	5.633	✓			
	.155	"	.155	✓			
	Ø.332	"	.332	✓			
	.500	"	.502	✓			
	.507	+.002 -.001	.507	✓			
	Ø.196	+.005 -.000	.199	✓			
SIDE B	.385 & .000	±.010	.385	✓			
	Ø1.000	±.010	1.000	✓			
	2.000	"	2.000	✓			
	1.000	"	1.000	✓			
	.375	±.010	.375	✓			
	R2.375	±.03	.03	✓			
	Ø.50	±.01	.500	✓			

Measured by:	[illegible]	Audited by:	[illegible]	Prototype Approval:	[illegible] N/A
Date:	07/06/01	Date:	07/06/01	Date:	07/06/01 N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

Chris Provencal

From: David Shepherd [dshepherd@dartaero.com]
Sent: June 5, 2007 5:18 PM
To: 'Chris Provencal'
Subject: RE: D3562-041/-042

As we have discussed previously, this is acceptable as long as the Magnabond doesn't break down.

David

From: Chris Provencal [mailto:cprovencal@dartaero.com]
Sent: Tuesday, June 05, 2007 11:00 AM
To: David Shepherd (David Shepherd)
Subject: D3562-041/-042

David,

For the D3562-041/-042 step weldment, as discussed. They want to switch from Sikaflex to Magnabond, and powder coat after final assembly.

As part of this change, the D3560-XX arms won't be powder coated, and the D2808 Bushing won't be assembled until after final assembly of the step weldment.

Since this is the first time trying this, we will ensure that the steps are checked after powdercoating in case the Magnabond doesn anything unexpected (eg. bubbling). If we see anything suspect, we will assemble them the old way.

Is this acceptable.

-Chris